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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/627,490

07/25/2003

Farhad Daghighian

402-26-015

4205

23935

7590

09/20/2006

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EXAMINER

CHENG, JACQUELINE

ART UNIT

PAPER NUMBER

3768

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/627,490	Applicant(s) DAGHIGHIAN, FARHAD	
	Examiner Jacqueline Cheng	Art Unit 3768	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1, 2, 6-8, and 11-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,008,546 (herein referred to as Mazziotta) in view of US Patent No. 6,484,050 B1 (herein referred to as Carroll). Mazziotta discloses a radiation probe that uses multiple detectors to detect radiolabeled malignant tissues in the body by being selectively sensitive to beta radiation while insensitive to gamma radiation. Because of the shorter range of beta radiation within the radiolabeled tissue, only the near radiolabeled tissues are detected by the probe (abstract), limiting the activation of the radiation detector to radiation emanating within a certain distance from the target source. The activation of the radiation detector is also limited through a gold sleeve that forms a collimator about the detector (col. 5 line 53-55). The radiation of the labeled source can be measured by a computer and can be displayed quantitatively such as in visual form as a graph (col. 7 line 42-43, fig. 5). What Mazziotta does not explicitly disclose is a delivery device operable in conjunction with the probe to deliver genetic treatment material. This limitation can be found in Carroll. Carroll discloses a radiation probe that detects radiolabeled tissues with passageways in the probe assembly which may be used to deliver any

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desired material such as genetic treatment material such as cells (col. 6 line 20-25). Carroll also discloses that these radiolabeled tissues can be visually displayed to the surgeon through an image of the node and adjacent tissues (col. 13 line 57-63). It would be obvious to one with ordinary skill in the art at the time of the invention to combine Carroll with Mazziotta to further the utility of Mazziotta in order to not only locate the malignant tissues, but to also treat it.

3. **Claims 3-5 and 9-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mazziotta in view of Carroll as applied to claim 1 and 7 above, and further in view of US Patent No. 6,474,341 B1 (herein referred to as Hunter). Carroll discloses that the probe includes some wireless transmission means for wirelessly transmitting signals from the probe to some receiver located outside the body of the patient, whereupon the visual and/or audible signals may be produced for perception by the operating personnel (col. 9 line 45-53). These transmitters can be easily used to detect the location of the probe in the body as this is well known in the art as can be seen in Hunter. Hunter discloses a method of locating the position of a wireless transmitter located on a probe (col. 3 line 6-17). It would be obvious to one with ordinary skill in the art at the time of the invention to combine Hunter with Mazziotta and Carroll in order to further the utility of the patents in order to be able to not only locate the radiolabeled tissues, but to also locate where these tissues are in reference to the body.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent No. 5,744,805 discloses a probe system for detecting radiation of radiolabeled tissue with transmitters and receivers.

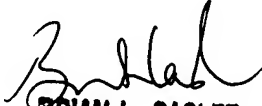
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacqueline Cheng whose telephone number is 571-272-5596.

The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eleni Mantis-Mercader can be reached on 571-272-4740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JC


BRIAN L. CASLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700